What is claimed is:

1. A cartilage therapeutic composition comprising a mixture of components of chondrocytes isolated and expanded or differentiated from a host, and thrombin and a fibrinogen matrix containing fibrinogen.

2. The cartilage therapeutic composition as set forth in claim 1, wherein the cell components are prepared by separating cells from a normal cartilage tissue isolated from the host using an enzyme, and incubating cells in a culture medium to obtain a culture containing more than 106 cells/mL.

3. The cartilage therapeutic composition as set forth in claim 1, wherein the thrombin is used in the amount of 0.01 to 50 IU/mL.

4. The cartilage therapeutic composition as set forth in claim 1, wherein the fibrinogen matrix contains 20 mg/mL to 200 mg/mL of fibrinogen.

5. The cartilage therapeutic composition as set forth in claim 4, wherein the fibrinogen matrix contains at least one antibiotic, such as penicillin G or streptomycin, or at least one antifungal agent, such as kanamycin, amphotericin B, nystatin or gentamycin.

6. The cartilage therapeutic composition as set forth in claim 4, wherein the fibrinogen matrix contains at least one component selected from: 0.01 mg/mL to 20 mg/mL of collagen, 0.1 mg/mL to 20 mg/mL of hyaluronic acid and 0.1 mg/mL to 20 mg/mL of glycosaminoglycan

(GAG), or 1 to 3000 KIU/mL of aprotinin.

7. A method of applying a cartilage therapeutic composition, the method comprising steps of:

preparing components of chondrocytes isolated and expanded or differentiated from a host cartilage;

preparing thrombin;

preparing a fibrinogen matrix;

treating a cartilage defect region; and

injecting a cartilage therapeutic composition containing a mixture of chondrocyte components, thrombin and a fibrinogen matrix into the cartilage defect region.

8. The method of applying a cartilage therapeutic composition as set forth in claim 7, wherein treating the cartilage defect region includes forming a plurality of connection holes having a predetermined diameter and depth in the cartilage defect region.

9. The method of applying a cartilage therapeutic composition as set forth in claim 7, wherein mixing and injecting chondrocyte components, thrombin and fibrinogen further includes spraying 100 IU/mL to 1000 IU/mL of a thrombin solution onto the cartilage defect region, including the connection holes, before and after injection of the mixture.

10. The method of applying a cartilage therapeutic composition as set forth in claim 7, wherein the fibrinogen matrix further contains at least one component selected from: 0.01

mg/mL to 20 mg/mL of collagen, 0.1 mg/mL to 20 mg/mL of hyaluronic acid, 0.1 mg/mL to 20 mg/mL of glycosaminoglycan (GAG), or 1 to 3000 KIU/mL of aprotinin.

11. A method of applying a cartilage therapeutic composition into the cartilage defect region, comprising the steps of:

preparing components of chondrocytes isolated and expanded or differentiated from a host cartilage;

preparing thrombin;

preparing a fibrinogen matrix;

treating a cartilage defect region;

collecting a periosteum sample;

suturing the periosteum sample to the cartilage defect region; and

injecting a cartilage therapeutic composition containing a mixture of chondrocyte components, thrombin and a fibrinogen matrix into the cartilage defect region inside of the periosteum.

12. The method as set forth in claim 11, wherein the fibrinogen matrix further contains at least one component selected from: 0.01 mg/mL to 20 mg/mL of collagen, 0.1 mg/mL to 20 mg/mL of hyaluronic acid, 0.1 mg/mL to 20 mg/mL of glycosaminoglycan (GAG), or 1 to 3000 KIU/mL of aprotinin.